

Notice of Allowability	Application No.	Applicant(s)	
	09/877,999	RANGER ET AL.	
	Examiner	Art Unit	
	Richard Schnizer, Ph. D	1635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/24/04.
2. ☒ The allowed claim(s) is/are 7-9,13,14 and 22-27.
3. ☒ The drawings filed on 6/8/01 and 1/20/04 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ferris Lander on 2/15/05.

The application has been amended as follows:

Cancel claims 20 and 21.

Add claims 26 and 27:

Claim 7. (currently amended) The multimolecular micelle of claim 20 26 wherein[[:]]:

said one or more hydrophobic vinyl compounds are ~~is at least one compound~~ selected from the group consisting of acrylates, acrylamides, alkylacrylates, alkylacrylamides, arylacrylates, and arylacrylamides.

Claim 8. (currently amended) The multimolecular micelle of claim 7 wherein:

said one or more hydrophobic vinyl compounds includes comprise at least one aliphatic or aromatic moiety selected from the group consisting of methacrylates and methacrylamides.

Claim 9. (currently amended) The multimolecular micelle of claim 7 wherein:

said hydrophobic ~~compound~~ is repeating monomers form at least one vinyl-terminated biodegradable polyester.

Claim 13. (currently amended) The multimolecular micelle of claim ~~20~~ 26 wherein:

said at least one hydrophilic block is comprises at least one repeating unit selected from the group consisting of acrylates, acrylamides, alkylacrylates, alkylacrylamides, and N-vinyl-2-pyrrolidones, ~~ethylene glycol and ethylene oxide~~.

Claim 14. (currently amended) The multimolecular micelles of claim 13, wherein:
said hydrophilic block originates from a macroinitiator ~~based on~~ comprising a poly(ethylene glycol) or a poly (N-vinyl-2-pyrrolidone).

Claim 22. (currently amended) The multimolecular micelle of claim ~~24~~ 27 wherein[[;]]:

said one or more hydrophobic vinyl compounds are ~~is at least one compound~~
selected from the group consisting of acrylates, acrylamides, alkylacrylates,
alkylacrylamides, arylacrylates, and arylacrylamides.

Claim 23. (currently amended) The multimolecular micelle of claim 22 wherein:

said one or more hydrophobic vinyl compounds ~~includes~~ comprise at least one
aliphatic or aromatic moiety selected from the group consisting of methacrylates and
methacrylamides.

Claim 24. (currently amended) The multimolecular micelle of claim 22 wherein:

said hydrophobic vinyl compound ~~is~~ repeating monomers form at least one vinyl
terminated biodegradable polyester.

Claim 25. (currently amended) The multimolecular micelle of claim 24 27
wherein:

said hydrophilic vinyl monomers ~~is at least one compound~~ are selected from the
group consisting of acrylates, acrylamides, alkylacrylates, alkylacrylamides, and N-vinyl-
2-pyrrolidones.

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Claim 26. (new) Multimolecular micelles consisting essentially of polyelectrolyte copolymers including at least one hydrophobic block and at least one hydrophilic block wherein:

1) said at least one hydrophobic block comprises ionizable and/or charged repeating monomers in combination with nonionic hydrophobic repeating monomers; wherein the ionizable and/or charged repeating monomers include at least one compound selected from the group consisting of alkylacrylic acid derivatives, acrylic acid derivatives, aminoalkylacrylate derivatives, and (amino alkyl) alkylacrylate derivatives, and wherein the non-ionic hydrophobic repeating monomers include a one or more hydrophobic vinyl compounds;

and

2) said at least one hydrophilic block, comprises a nonionic hydrophilic polymer or oligomer that is polyethylene glycol or that is synthesized from hydrophilic vinyl monomers; and

wherein said hydrophobic block comprising ionizable and/or charged repeating monomers in combination with the nonionic hydrophobic repeating monomers forms a micellar core and said hydrophilic block forms the exterior of the micelle.

Claim 27. (new) The multimolecular micelles of claim 26 wherein each said polyelectrolyte copolymer is a graft copolymer wherein:

1) said hydrophobic block serves as a backbone to which said hydrophilic polymers or oligomers are grafted, wherein said hydrophobic block comprises ionizable and permanently-charged amphiphilic random copolymers including at least one compound selected from the group consisting of alkylacrylic acid derivatives, acrylic acid derivatives, aminoalkylacrylate derivatives, and (amino alkyl) alkylacrylate derivatives in combination with said nonionic hydrophobic repeating monomers; and/or

2) said hydrophilic block serves as a backbone to which one or more hydrophobic blocks of claim 27 are grafted.

Reasons for Allowance

The amendments set forth above overcome rejections previously set forth under 35 USC 112 first and second paragraphs, and 35 USC 102.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner(s) should be directed to Richard Schnizer, whose telephone number is 571-272-0762. The examiner can normally be reached Monday through Friday between the hours of 6:00 AM and 3:30. The examiner is off on alternate Fridays, but is sometimes in the office anyway.

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If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, John Leguyader, be reached at 571-272-0760. The official central fax number is 703-872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.



Richard Schnizer, Ph.D.

DAVE TRONG NGUYEN
PRIMARY EXAMINER